United States Patent [19]

Davenport

[11] **4,274,717**

[45] **Jun. 23, 1981**

[54] **OPHTHALMIC PROGRESSIVE POWER LENS AND METHOD OF MAKING SAME**

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[21] Appl. No.: **40,235**

[22] Filed: **May 18, 1979**

[51] **Int. Cl.**[3] **G02C 7/06**

[52] **U.S. Cl.** **351/169**; 351/177

[58] **Field of Search** 351/169, 176

[56] **References Cited**

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[57] **ABSTRACT**

An improved ophthalmic lens made of refractive material and having varying focal length, said lens having two refractive surfaces one of which is divided into first, second and third viewing zones intended respectively for distant vision, intermediate vision and near vision. The first viewing zone of the lens occupies substantially the upper half of said one surface and has a substantially constant curvature providing a substantially constant focal length for distant vision. The third zone of the lens occupies the lower central portion of said one surface and has a substantially constant curvature providing a substantially constant focal length for near vision. The second zone of the lens lies between the first and third zones and has a varying curvature providing a varying focal length, the curvature of the second zone varying progressively from the substantially constant curvature of the third zone. The improvement in the lens consists in the novel manner in which the lens surface comprising the second viewing zone is generated so as to provide a uniquely configured, strategically located intermediate viewing zone which is totally free of astigmatism and distortion.

8 Claims, 11 Drawing Figures